

sequence of the Tartaglia et al. published and unaltered human OB-R is set forth in SEQ ID NO: 56." and substitute -~~For~~ For clarification and reference herein, the term OB-R, when applied to the published and unaltered leptin receptor polypeptide, refers to that disclosed in Tartaglia et al. [Cell 83: 1263-1271 (1995)], which is incorporated herein by reference in its entirety.

C<sup>1</sup> The amino acid sequence of the Tartaglia et al. published and unaltered mouse OB-R is set forth in SEQ ID NO: 55. The amino acid sequence of the Tartaglia et al. published and unaltered human OB-R is set forth in SEQ ID NO: 56.- therefore.

IN THE CLAIMS:

Please amend the claims as follows:

27. (Amended) The DNA molecule of claim 24 which codes on expression for a polypeptide selected from the group consisting of:

- C<sup>2</sup>
- a) a leptin receptor selected from the group consisting of OB-Ra (SEQ ID NO:2), OB-Rb (SEQ ID NO:4), OB-Rc (SEQ ID NO:6), OB-Rd (SEQ ID NO:8), and OB-Re (SEQ ID NO:10), or allelic variants thereof;
  - b) a leptin receptor selected from the group consisting of:
    - i. N-terminal corresponding to OB-Ra through Lys<sup>889</sup> and C-terminal corresponding to a C-terminal selected from the group consisting of OB-Rb after Lys<sup>889</sup> (SEQ ID NO:57), OB-Rc after Lys<sup>889</sup> (SEQ ID NO:58), and OB-Rd after Lys<sup>889</sup> (SEQ ID NO:59);
    - ii. N-terminal corresponding to OB-Rb or OB-Rc through Lys<sup>889</sup>, and C-terminal corresponding to OB-Ra after Lys<sup>889</sup> (SEQ ID NO:60,61) or OB-Rd after Lys<sup>889</sup> (SEQ ID NO:62,63);
    - iii. N-terminal corresponding to OB-Rd through Lys<sup>889</sup>, and C-terminal corresponding to OB-Ra after Lys<sup>889</sup> (SEQ ID NO:64), OB-Rb after Lys<sup>889</sup> (SEQ ID NO:65), or OB-Rc after Lys<sup>889</sup> (SEQ ID NO:66);
    - iv. N-terminal corresponding to SEQ ID NO:55 from Pro<sup>664</sup> to Lys<sup>889</sup>, and C-terminal corresponding to OB-Ra after Lys<sup>889</sup> (SEQ ID NO:67), OB-

Rb after Lys<sup>889</sup> (SEQ ID NO:68), OB-Rc after Lys<sup>889</sup> (SEQ ID NO:69), and OB-Rd after Lys<sup>889</sup> (SEQ ID NO:70);

- v. N-terminal corresponding to SEQ ID NO:55 from Met<sup>733</sup> to Lys<sup>889</sup>, and C-terminal corresponding to OB-Ra after Lys<sup>889</sup> (SEQ ID NO:71, OB-Rb after Lys<sup>889</sup> (SEQ ID NO:72), OB-Rc after Lys<sup>889</sup> (SEQ ID NO:73), and OB-Rd after Lys<sup>889</sup> (SEQ ID NO:74);
- vi. N-terminal selected from the group consisting of OB-Ra, OB-Rb, OB-Rd, and SEQ ID NO:55 from Pro<sup>664</sup>, through His<sup>796</sup>, and OB-Re from His<sup>796</sup> SEQ ID NO:75,76,77 and 78);
- vii. N-terminal corresponding to SEQ ID NO:55 from Met<sup>733</sup> to His<sup>796</sup>, and OB-Re from His<sup>796</sup> (SEQ ID NO:79), and
- viii. allelic variants of any of subparts i) through vii) above;

c) a leptin receptor wherein

- viii. the N-terminal sequence is selected from the group consisting of
- (1) amino acid residues 1-889 (SEQ ID NO:80);
  - (2) amino acid residues 23-889 (SEQ ID NO:81);
  - (3) amino acid residues 28-889 (SEQ ID NO:82);
  - (4) amino acid residues 133-889 (SEQ ID NO:83);
  - (5) amino acid residues 733-889 (SEQ ID NO:84);
  - (6) amino acid residues 1-796 (SEQ ID NO:85);
  - (7) amino acid residues 23-796 (SEQ ID NO:86);
  - (8) amino acid residues 28-796 (SEQ ID NO:87);
  - (9) amino acid residues 28-796 preceded by an N-terminal Asp-Pro dipeptide (SEQ ID NO:88);
  - (10)[(9)] amino acid residues 133-796 (SEQ ID NO:89);
  - (11)[(10)] amino acid residues 733-796 (SEQ ID NO:90); and
  - (12)[(11)] allelic variants of any of subparts (1) through (10)

above; and

- ix. the C-terminal sequence is selected from the group consisting of